

10/568081

IAP5 Rec'd PCT/PTO 13 FEB 2006
SEQUENCE LISTING

<110> Temasek Life Sciences Laboratory

<120> NUCLEIC ACIDS FROM RICE CONFERRING RESISTANCE TO BACTERIAL BLIGHT
DISEASE CAUSED BY XATHOMONAS SPP

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<160> 52

<170> PatentIn version 3.1

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tccccgcctt cgtctcgagg t

21

<210> 18

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> oligonucleotide

<400> 18

aagcagtggt atcaacgcag agtacgcggg

30

<210> 19

<211> 57

<212> DNA

<213> Artificial Sequence

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<223> primer

<220>

<221> misc_feature

<222> (57)..(57)

<223> n = a, t, c, or g

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<211> 22

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<213> Artificial Sequence

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<223> primer

<400> 20
caaccagcaa cgccaccgag cc 22

<210> 21

<211> 23

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<213> Artificial Sequence

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<223> primer

<400> 21
aagcagtggt atcaacgcag agt 23

<210> 22

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<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 22
accttgcgtc gccctactcc tg 22

<210> 23
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
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<220>
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<222> (49)..(49)
<223> n= a, t, c, or g

<220>
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<223> n= a, t, c, or g

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27

<210> 24
<211> 23
<212> DNA
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<220>
<223> primer
<400> 24
ctcttcagca atggcggcag cga

23

<210> 25

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 25

ctaatacgac tcactatagg gcaagcagtg gatatcaacgc agagt

45

<210> 26

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 26

ctaatacgac tcactatagg gc

22

<210> 27

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 27

acacacagat ccgtactcaa ctcc

24

<210> 28

<211> 38

<212> DNA

<213> Artificial Sequence

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<223> primer

<400> 28

gaccacgcgt atcgatgtcg acrrrrrrrr tttttttt

38

<210> 29

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 29

gagagcatca gagcaaagta ctcc

24

<210> 30

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 30

gaccacgcgt atcgatgtcg ac

22

<210> 31

<211> 14

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (1)..(1)

<223> n = a, g, c, or t

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ntcgaswtsg wgtt

14

<210> 32

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (1)..(1)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n = a, g, c, or t

<400> 32
ngtcgaswga nawgaa

16

<210> 33
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> primex
<220>
<221> misc_feature
<222> (5)..(5)
<223> n = a, g, c, or t

<220>
<221> misc_feature
<222> (10)..(10)
<223> n = a, g, c, or t

<220>
<221> misc_feature
<222> (13)..(13)
<223> n = a, g, c, or t

<400> 33
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16

<210> 34
<211> 16
<212> DNA
<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (1)..(1)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (11)..(11)

<223> n = a, g, c, or t

<400> 34
ngtasaswgt nawcaa

16

<210> 35

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (5)..(5)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (10)..(10)

<223> n = a, g, c, or t

<400> 35
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16

<210> 36

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<220>

<221> misc_feature

<222> (5)..(5)

<223> n = a, g, c, or t

<220>

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<222> (10)..(10)

<223> n = a, g, c, or t

<220>

<221> misc_feature

<222> (13)..(13)

<223> n = a, g, c, or t

<400> 36
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16

<210> 37

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 37

acgttgtaaa acgacggcca gt

22

<210> 38

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 38

gtaatacgac tcactatagg gcga

24

<210> 39

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 39

gagtcgacct gcaggcatgc a

21

<210> 40

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 40
cttcgggctc gtatgttggtg tgg

23

<210> 41

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 41
gagcggataa caatttcaca cagga

25

<210> 42

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 42
ttaggtgaga ctatagaata ctca

24

<210> 43

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 43

taacaacatg agaattacta atccg

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<210> 44

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 44

catgkatcca agttcgtagc tag

23

<210> 45

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 45

ttgggtttttt tgaatgaagg gtatat

26

<210> 46

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 46
aattcatgcc cacaagtaca gtac 24

<210> 47

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 47
ctgaaacaca ggaaaaatcc cgtt 24

<210> 48

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> primer

<400> 48
tgcataggcc ctgtttagtt ctaa 24

<210> 49

<211> 1552

<212> DNA

<213> Oryza sativa

<220>

<221> xa31 promoter of IRBE31 allele (resistant allele)

<222> (1)..(1552)

<223>

<220>

<221> Xa31 promoter of IRBB31 allele (resistant allele)

<222> (1)..(1552)

<223>

<400> 49

gctgaaccaa acagttttag ctccatcgaa gaaaggagtt atactgattg gaatgctctc	60
acagtaaaaa aaacaaggaa gtagagctgg atttragaca gttctacaag aagttagaac	120
tctacaaaaa ttggaatttt ggatgatggt cttttaaaaa ctcgattgca ggaataaaat	180
tttacggott gaaacttaca aaatgattag aaaagataac atgcctcagc gatttgtaaa	240
aaagtgaaca aataaaaaatc tacaatacca ctaaactatt gctttatfff ggggacattg	300
cttaccattg aaaaaacaac taaccgtaaa tacgaacacc catatcaa atactatcac	360
tgataaaaata atcaattgta aattcaagca cacatattag tatagtactt taactogatt	420
ggatagaaga aacctaaacta atttaagcta tgcctcacia caaaaaggta taaatttttt	480
aaggcttctt tttttttctt gcgtttgcta gtttatgctt ttaagatggt tatacctttt	540
actccctcca ttactgttt aaatacaatg ggaattagtg aaatcaatga gagtccaac	600
ttcgaaacac tgaatacatg ttatcttgga ttgaaatcaa atcgaatcag tcaaattcaa	660
ataggaggag gaacataggc attcttctct tcttcagcgg gcaccattga attcagatac	720
tgcttcgcct agtctctgtc caagactcca cattttctga tgggtgaggg gaactctgaa	780
actataggag gaagaataaa atgaagaatg cagaatgaa tagtaatttg tgttttttaa	840
ttctttctca attccacctt aggatccaac ttcagtccaa atccaaagta atgcaactgc	900
cactagatca ggctagagct tcaaattcaa ctccaaaaac ctccgtaaag tggcacacac	960
agaggaaaaa tcctggatto gtcaactgcc atcaacatct gctttcgctt cccaattcct	1020
gctttctgaa atctgctttc gccgaattca tgccttcttg aattatgctt tcttagacct	1080
tcttttagatg ggactaaaaa ttttactctc tatcacatcg gatgtttgga cactaattat	1140
aaatattaaa cgtagactat taataaaaacc catctataat ctgtgattaa ttgcgagac	1200
gaatctattg agccraatta atccatgatt agcctatgtg atgctataat aaacattctc	1260
taattataaa ttaattgggc ttaaaaaatt tgtctcgcgt attagctttc atttatataa	1320
ttagttttat aaatagtcta tatttaatac tctaaattag tgtctaaata cagggactaa	1380

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agttaagtca ctggatccaa acaccaccta aggtttttctt gtgtacttgt gaattgtggt 1440
tgactacgac tactagtgtc ataaatagaa gaagagaccc atagagagca tcagagcaaa 1500
gtactcctaa aagacagcca cacacactga gacacccaag aagctgcctc ca 1552

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<210> 50

<211> 541

<212> DNA

<213> *Oryza sativa*

<220>

<221> Xa31 3' regulation region of IRB31 allele (resistant allele)

<222> (1)..(541)

<223>

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<400> 50
ttctctccg tgcgggtgg tcatcttctt ctccgtgctt ttgctctgga gttgagtacg 60
gatctgtgtg tactgcattc ttgcttaatt agtgccttac acgttatgct ttcgaaacat 120
catctttttt cagtatagtt caataaattt cagctcaaat ttgtcctcca agaagagttc 180
tccatccaaa cgaaacttat ggtgttccgt tgtttgggce gattttatat gttggaaatg 240
tacagacttc atagtactgt gtttcttttt tggaataagt tcaccagagg ttccttaact 300
taacggcgat attttttttag gtcctttaac cacaaaacca gaaatgtgca cccctaaact 360
ttcacaatcc gtgcacaaga ggtcctatgg cagtatacgt ggggtggttcc gctgacgtga 420
catcctagtc agcaaaaata aataaataag taagtggggc ccataatgta gtgagagaaa 480
acgatgcggg cccacatcc cttctttttt cccctttctt ctctctctgt cttctctgac 540
g 541

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<210> 51

<211> 1583

<212> DNA

<213> *Oryza sativa*

<220>

<221> xa31 promoter of IR24 allele (susceptible allele)

<222> (1)..(1583)

<223>

<400> 51

gctgaaccaa acagttttag ctccatcgaa gaaaggagtt atactgattg gaatgctcac	60
agttaaaaaa aacaaggaag tagagctgga ttttagacag ttctataaga agttagaact	120
ctaccaaacg gatagttaat tggaattttg gatgatgggc ttttaaaaac tcgattgcag	180
gaataaaaatt ttacggcttg aaacttacaa aatgattaga aaagataaca tgcctcagcg	240
atttgtaaaa aagtgaacaa ataaaaatct acaataccac taaactattg ctttattttg	300
gggacattgc ttaccattga aaaaacaact aaccgtaaat acgaacaccc atgtcaaata	360
tactatcact gataaaataa tcaattgtaa attcaagcac acatattagt atagtacttt	420
aactcgattg gatagaagaa acctaaactaa ttttaagctat gcctcacaac aaaaaggtaa	480
aaatttttta aggcttcttt ttttttcttg cgtttgctag tttatgcttt taagatgttt	540
atacttttta ctccctcat tcactgttta aatacaatgg gaattagtga aatcaatgag	600
agttcaaaact tcgaaacact gaatacatgt tattttggat tgaaatcaaa tcgaatcagt	660
caaattcaaa taggaggagg aacataggca ttcttccttt cttcagcggg caccattgaa	720
ttcagatact gcttcgccta gtctctgtcc aagactccac attttctgat ggtgatgggg	780
aactctgaaa ctataggagg aagaataaaa tgaagaatgc agaatgaat agtaatttgt	840
gttttttaat tcttcttcaa ttccacctta ggatccaact tcagtccaaa tccaaagtaa	900
tgcaactgcc actagatcag gctagagctt caaattcaac tccaaaaacc tccgtaaagt	960
ggcacacaca gaggaaaaat cctggattcg tcactgccc acaacatctg ctttcgcctc	1020
ccaattcctg ctttctgaaa tctgctttcg ccgaattcat gccttcttga attatgcttt	1080
cttagacctt ctttagatga gactaaaact tttactctct atcacatcgg atgtttggac	1140
actaattata aatattaaac gtagactatt aataaaaccc atctataatc ttgtattaat	1200
tcgcgtgaag aatctattga gcctaattaa tccatgatta gcctatgtga tgctataata	1260
aacattctct aattataaat taattgggct taaaaaattt gtctcgcgta tttagctttca	1320
tttatgtaat tagttttata aatagtctat atttaatact ctaaattagt gtctaaatac	1380

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agggactaaa gttaagtccc tggatccaaa cggcacctaa ggttttcttg tgtacttgtg 1440
aattgtgggt tcttgtgtac ttgtgaattg tggttgacta cgactacgag tgctataaat 1500
agaagagacc aatagagagc atcagagcaa agtactccta aaagacagoc acacacactg 1560
agacacccaa gaagctgcct cca 1583

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<210> 52

<211> 541

<212> DNA

<213> *Oryza sativa*

<220>

<221> xa31 3' regulation region of IR24 allele (susceptible allele)

<222> (1)..(541)

<223>

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<400> 52
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gatctgtgtg tactgcattc ttgcttaatt agtgccctac acgttatgct ttcgaaacat 120
catctttttt cagtatagtt caataaattt cagctcaaat ttgtcctcca agacgagttc 180
tccatccaaa cgaaacttat ggtgttccgt tgtttgggcc gattttatat gttggaaatg 240
tacagacttc atagtactgt gtctcttttt tggataaagt tcaccagagg ttctttaact 300
taacggcgat attttttttag gtcctttaac cacaaaacca gaaatgtgca cccctaaact 360
ttcaaatcc gtgcacaaga ggtcctatgg cagtatacgt ggggtggttc gctgacgtga 420
cactctagtc agcaaaaata aataaataag taagtggggc ccatatgtaa gtgagagaaa 480
acgatgcggg cccacatcc ctctcttttc cccctttctt ctctctctgt ctctctcgac 540
g 541

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